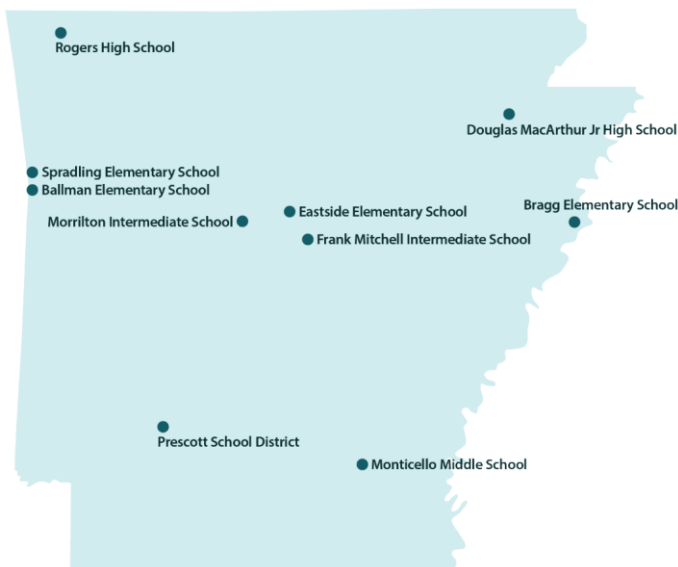


On the Road to Impact:

Solution Tree Arkansas *PLC at Work*® Cohort 1 Year 2 Milepost Memo Executive Summary

As part of the state's commitment to continuous improvement in student achievement, the Arkansas Division of Elementary and Secondary Education partnered with Solution Tree to launch the Professional Learning Communities at Work® (*PLC at Work*) project in the 2017–18 school year. The nine schools and one district included in the evaluation received on-site support and professional development to build and sustain a strong culture of collaboration focused on enhancing student learning.



After two years, *PLC at Work* is having a **positive impact on achievement growth** in Arkansas, particularly in math. Education Northwest measured growth on the ACT Aspire English language arts (ELA) and math assessments between the year prior to implementation (2016–17) and the end of Year 2 (2018–19). The independent evaluation is designed to meet standards for Tier II evidence according to the Every Student Succeeds Act.

Key findings

The Arkansas *PLC at Work* model:

- Had an **overall positive impact** on math ACT Aspire growth
- Had a **positive impact for specific student groups** on math ACT Aspire growth
- **Exceeded impact on math achievement gains** shown in other professional learning programs

The attention [students are] getting through interventions has impacted them and they're very well aware that they're being helped more ... It's impacted their academic achievement ... and their self-confidence.

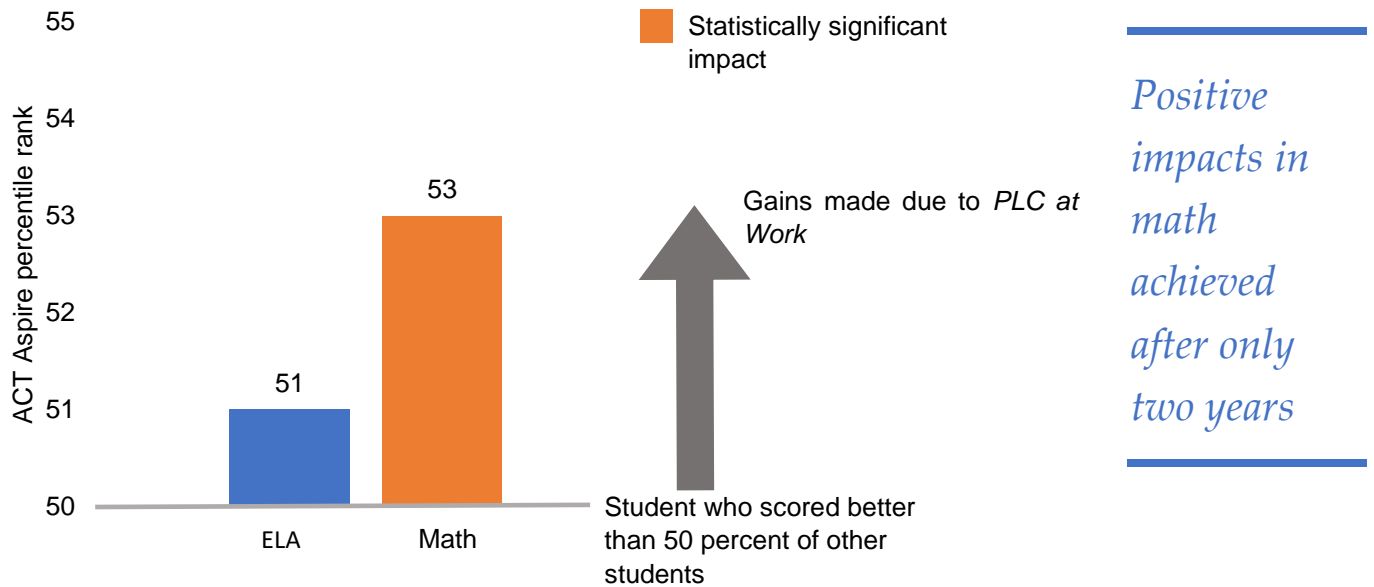
— *PLC at Work* school administrator

The findings in this executive summary do not capture impacts from the full three-year implementation of *PLC at Work* in Cohort 1 schools. Due to COVID-19, state assessment scores for the third and final implementation year (2019–20) are not available. Future studies are needed to verify these promising results.

How did the Arkansas *PLC at Work* model impact student achievement for Cohort 1 students after two years?

The Arkansas *PLC at Work* model had a *positive impact on math ACT Aspire scores*. This impact translates to moving a student who would have scored at the 50th percentile (better than half of students who took the test) to the 53rd percentile (figure 1). In ELA, the same student would have moved from the 50th percentile to the 51st percentile.

Figure 1. *PLC at Work* had a positive impact on math ACT Aspire scores



Source: Analysis of Arkansas Division of Elementary and Secondary Education data, 2016–17 to 2018–19.

The lower students that have struggled their whole school lives, their confidence is so ... I mean, they're out there and they're proud. They're changing [from] getting Fs and now some would get an 80 percent on their tests because of interventions.

— *PLC at Work* teacher

Not only are [students] aware of their goals, they're aware of their weaknesses, and they're not afraid to target those weaknesses and work towards that to reach their goals.

— *PLC at Work* teacher

[PLC at Work] is positively impacting students, [and] we're seeing scores improve. They're not just jumping overnight, because we're in for a long haul. But we are seeing a positive trajectory to our scores and overall performance.

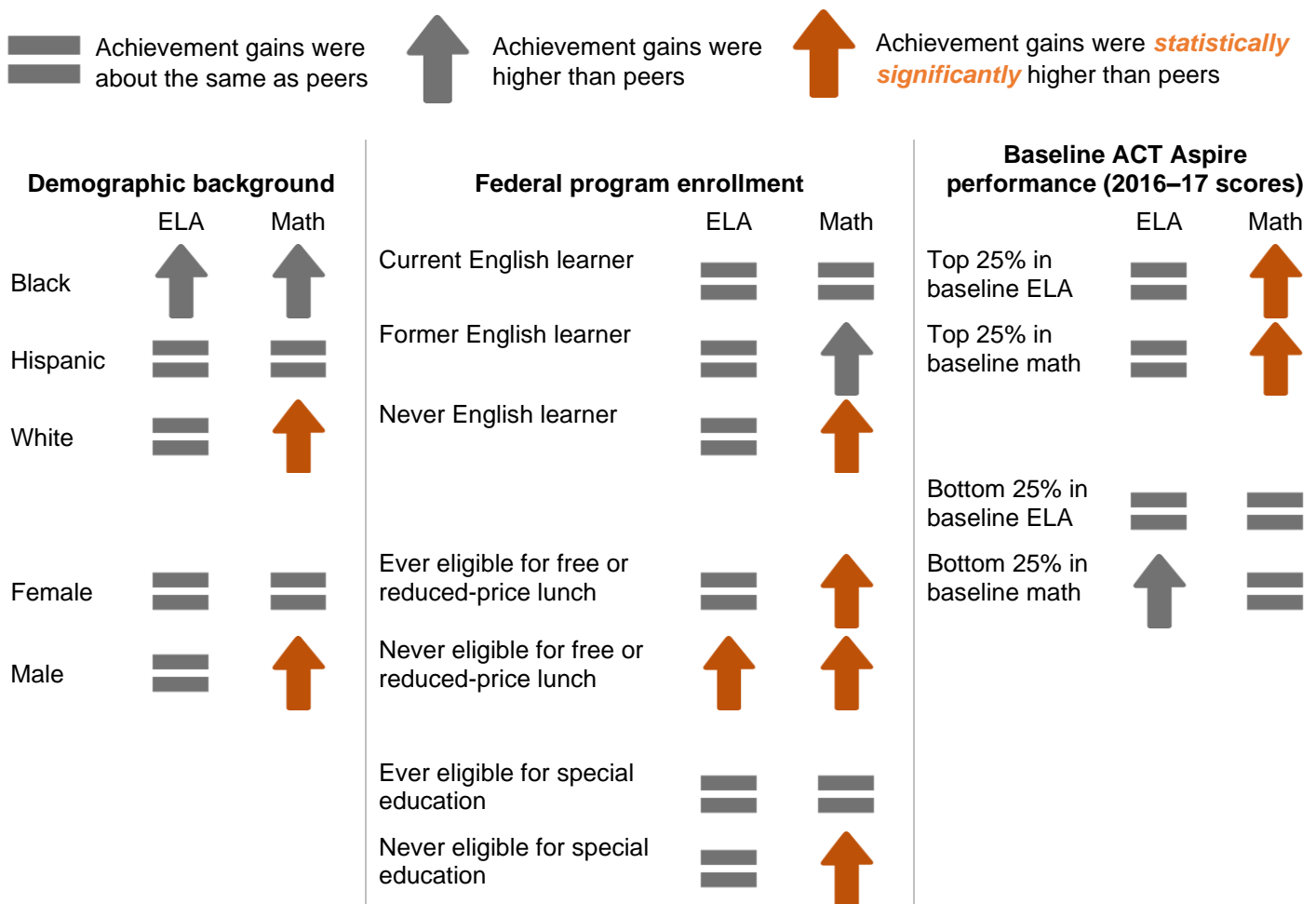
— *PLC at Work* school administrator

How did the Arkansas *PLC at Work* model impact student achievement for students from different demographic groups?

The Arkansas *PLC at Work* model had a *positive impact on math student achievement for specific student groups*. ELA and math achievement gains for all student groups were either significantly higher than or about the same as their peers in non-*PLC at Work* schools (figure 3).

Students from demographic groups that generally experience positive academic outcomes also tended to see the most gains from *PLC at Work* implementation in their schools. Many groups of students from traditionally underserved backgrounds also outperformed the achievement of their peers in the comparison group, but these differences were often not large enough to rule out the possibility that they were due to chance.

Figure 3. Students from different backgrounds made gains on the ACT Aspire ELA and math assessments at about the same rate or at higher rates than their peers



Source: Analysis of Arkansas Division of Elementary and Secondary Education data, 2016–17 to 2018–19.

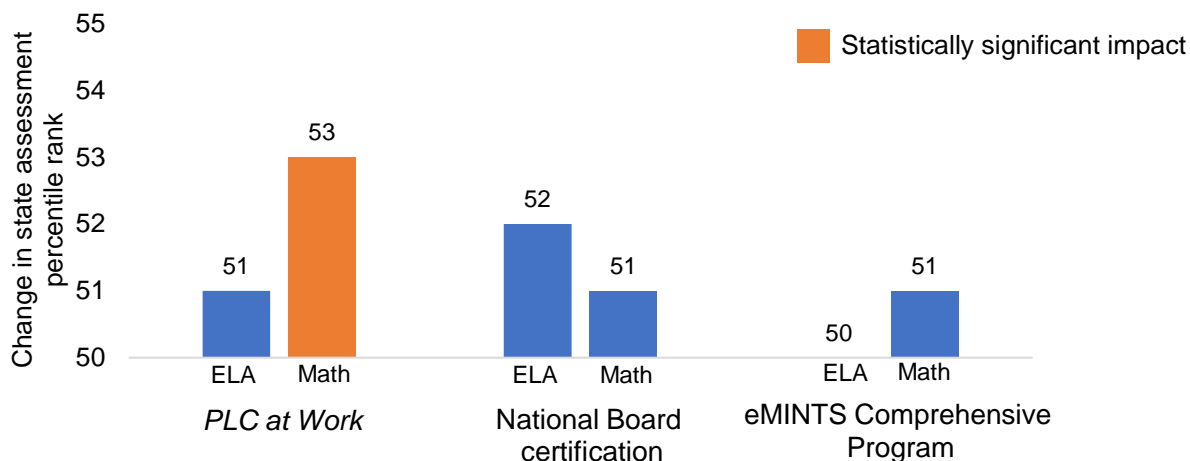
We have this completely new view of our students with data and everything else that we've achieved ... my teaching will never be the same because of it.

— *PLC at Work* teacher

How does *PLC at Work*'s impact compare to other professional learning programs?

The impact of the Arkansas *PLC at Work* model on math achievement gains was *three times higher* than gains seen from National Board certification and the eMINTS Comprehensive Program. A review of five studies of the National Board for Professional Teaching Standards certification and two studies of the eMINTS Comprehensive Program concluded that these professional learning programs did not translate into significant gains for students in either ELA or math.¹ In contrast, the Arkansas *PLC at Work* model demonstrated a positive and statistically significant impact on math achievement gains. The impact on ELA achievement gains after two years of *PLC at Work* services was similar to that of National Board certification: the result was positive but not strong enough to confidently conclude that it was not due to chance.

Figure 2. *PLC at Work* had a larger impact on math achievement gains than other professional learning programs



Sources: Analysis of Arkansas Division of Elementary and Secondary Education data, 2016–17 to 2018–19; What Works Clearinghouse.¹

We've done [schoolwide] reading in the past, and it didn't really work. It was too much ... [The Solution Tree associate] sat down, and for half of a day, we built an interconnected model of observation, a planner, and a method for teachers to keep track of their students.

— *PLC at Work* school administrator

I'm seeing veteran teachers change and try new things ... they're trying these new strategies that they're being exposed to. It's very encouraging to see them changing what they've done for years.

— *PLC at Work* school administrator

For more information about the independent evaluation of *PLC at Work* in Arkansas, please contact:

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¹ What Works Clearinghouse, Institute of Education Sciences, U.S. Department of Education. (2020, April). eMINTS Comprehensive Program. https://ies.ed.gov/ncee/wwc/Docs/InterventionReports/wwc_EESL_eMIN_IR_apr2020.pdf

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